

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: James A. Neal

GENERAL INFORMATION:

Name: Vanderbilt Chemical Corporation
& Vanderbilt Mineral Corporation
Address: 396 Poor Farm Road E.
Murray, Kentucky 42071
Date application received: December 14, 1998
SIC/Source description: 2869 & 3295
Plant ID: 21-035-00008
Application log number: F929(50724)/53350/54281
Permit number: V-02-011

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

☐ Source is out of compliance ☐ Compliance schedule included
☒ Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR <input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(2)(b) or 51:052,1(14)(b)		

MISCELLANEOUS:

☐ Acid rain source
☐ Source subject to 112(r)
☐ Source applied for federally enforceable emissions cap
☐ Source provided terms for alternative operating scenarios
☐ Source subject to a MACT standard
☐ Source requested case-by-case 112(g) or (j) determination
☐ Application proposes new control technology
☒ Certified by responsible official
☒ Diagrams or drawings included
☒ Confidential business information (CBI) submitted in application
☐ Pollution Prevention Measures
☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)*	Potential (tpy)+
PM	647.0	1100.0
SO ₂	0.51	0.51
NO _x	174.0	174.0
CO	43.4	43.4
VOC	1560.0	2080.0
LEAD	NA	NA
HAP \$ 10 tpy (by CAS)	<10 **	<10**

* (C) Controlled +(U) Uncontrolled

** Carbon Disulfide (C)=0.228, (U)=0.347; Hydrazine (C)=0.081, (U)=0.124;
o-Toluene Diamine (C)=0.00024, (U)=0.024; Catechol (C)=0.00078, (U)=0.0012

SOURCE PROCESS DESCRIPTION:

R.T. Vanderbilt Company operates Vanderbilt Chemical Corporation and Vanderbilt Mineral Corporation in Murray Kentucky. The chemical plant manufactures organo-metallic chemicals, lubricant additives, rubber accelerators, pesticide, inidiazoles (aqueous and organic solvent basis) and phenanthrolines. Most of these chemicals are members of the dithiocarbamate family. Miscellaneous organic chemicals include antioxidants and paint additives (dryers). Reactors, boilers, blenders, centrifuges, condensers, decanters, stills and organic and inorganic storage tanks support production. Reactants include amines, diamines, carbon disulfide, dithiophosphoric acid, hydrogen peroxide, sulfuric acid, nitric acid, sodium hydroxide and metal oxides of lead, antimony, molybdenum and zinc. Processing aids include various alcohols IPA, n-propanol and butanol. A complete batch cycle requires between 16 to 24 hours. Products are blended, dried, packaged or mixed with mineral oils to form concentrated lubricant additives.

The Mineral plant produces different grades of high quality clay under the trade name VeeGum⁷ Clay.

Other activities that contribute to production, but are considered insignificant activities for the different plants are addressed in Section C of the draft permit.

EMISSION AND OPERATING CAPS DESCRIPTION: N/A